

Alectrion (Ilyanassa) obsoleta (Say). Long Beach; especially around the west end, and eastward of Milford Beach.

Alectrion (Tritia) trivittata (Say). Stratford Beach, abundant, common generally.

Busycon carica (Gmelin). Silver Beach, Milford, and others; occasional.

Busycon canaliculatum (Linné). Commoner than previous.

Melampus lineatus Say. Abundant on salt marshes.

A comparison of this fauna with that found on the south or ocean shore of Long Island shows a conspicuous absence of the following genera: *Nucula*, *Yoldia*, *Astarte*, *Divaricella*, *Donax*, *Tagelus*, *Siliqua*, *Corbula*, *Turbonilla*, *Epitonium*, *Triphoris*, *Bittium*, *Acteon*, *Tornatina*, *Cyclina*. Although some of these may later be found in this general vicinity, the majority of them are species demanding conditions of full salinity, clean ocean water, and clean sand. At Beaufort, N. C., for instance, *Donax versicolor* was most plentiful on the inlet shores. Once the inlet banks had turned inward far enough to face the sound this species was lacking or rare. There is, therefore, considerable difference in habitats whose substratum conditions are identical but which are situated in a sound or bay and on the ocean proper. In this connection it would be interesting to determine how far eastward beyond Long Island *Donax* may be found, as at Block Island, Martha's Vineyard and Nantucket, before the cold stream from the north would be felt sufficiently to change the temperature conditions found along the south shore of Long Island.

TWO NEW NAIADES FROM NICARAGUA

BY BRYANT WALKER

The following species were submitted to me by Rev. W. H. Fluck of Great Kills, Staten Island, N. Y., for examination and description, if they proved to be new. Both of them appear to be undescribed.

Nephronaias elva n. sp. Pl. I, figs. 1-2.

Shell solid, broad oval, rounded before and behind, sub-compressed, with a very low, nearly obsolete posterior ridge, which scarcely affects the posterior margin and which is outlined by a shallow groove along its posterior side; beaks but slightly elevated, eroded in the specimens seen; surface slightly sulcate towards the beaks, much more so towards the margins and covered with numerous fine striae very close together, which are cut by radial impressed lines extending from the beaks to the margins, which are deeper and further apart anteriorly and posteriorly, giving them a festooned appearance, which is almost granular in the center of the disk; epidermis dark brown, shading into yellowish around the margins, rayless; left valve with two strong, erect pseudocardinals, which are nearly parallel, and two slightly curved laterals; interdentum rather long, narrow and rounded; right valve with a single, strong, elevated pseudocardinal, the sides of which are about parallel with a small, compressed tooth above it, and one lateral; anterior muscle scars deeply impressed and roughened, posterior scars much less so; pallial line distinct, with radiating sculpture especially on the upper side; nacre bluish white, slightly iridescent posteriorly; dorsal scars numerous, deep and situated under the interdentum.

Length 62, alt. 44.2, diam. 25.2 mm.

Type locality, the Wanks River or Rio Coco, Nicaragua.

Type in the collection of Rev. W. H. Fluck.

Mr. L. S. Frierson, to whom a photograph was submitted, suggested that it was very close to *Nephronaias reticulata* Simp., if not identical with it. On sending similar photographs to Mr. W. B. Marshall of the U. S. National Museum for comparison with Simpson's type, he replied as follows:

"At first I thought your shell surely was *Nephronaias reticulata* Simpson, but when I came to examine the sculpture I found that, although Simpson's shell is only about two-thirds as large as yours, the sculpture on his is two or three times as coarse. This put me on the fence as to whether yours is or is not a new species, so I called Dr. Bartsch to my assistance

and, between us, we came to the conclusion that yours is probably different from Simpson's. Your shell is much more round than Simpson's. Simpson's shell is very light chestnut in color. I should hardly call the nacre of Simpson's shell lurid. It is really a dirty white with a little iridescence near the posterior portion."

It would seem, therefore, that the present form is well entitled to a name, even though a larger series might afford connecting links.

There was originally another specimen, a little smaller than the type, but otherwise exactly the same, which was unfortunately lost in the mail.

At the request of Mr. Fluck, I have named the species after his niece, Miss Elva M. Smith.

Anodontites flucki n. sp. Pl. I, figs. 3-4.

Shell obovate, thin, inflated, slightly compressed by a faint depression extending from the beaks to the anterior basal margin; inequilateral; slightly gaping towards the anterior margin, but not posteriorly; beaks moderately full, but little elevated, the tips decidedly incurved; hinge line nearly straight, angled at both ends where it passes into the anterior and posterior margins; anterior end narrowed and rounded; base slightly incurved at about the anterior third, corresponding to the depression across the disk; posterior end regularly and somewhat broadly expanded, the greatest height being behind the middle of the shell; surface smooth with irregular growth lines; epidermis greenish yellow, dark green on the posterior slope and towards the anterior end, with faint narrow, green rays over the center of the disk; nacre light blue, slightly salmon-color within the beak cavities, very iridescent, faintly radiately sculptured.

Length 87.3, alt. 46.5, diam. 31.3 mm.

Type locality, the Wanks River or Rio Coco, Nicaragua.

Type No. 74610, Coll. Walker. Cotypes in the collection of Rev. W. H. Fluck.

As suggested by Mr. Frierson from an inspection of a photograph of the type, this species is evidently rather closely re-

lated to *A. nicaraguae* Phil. described in 1848 (Zeits. für Mal., XV, p. 130). It has never been figured or found since. Von Martens (Biol. Cent. Am., 1900, p. 536) believed it to be the same as *A. bridgesi* Lea. If so, it is quite different from *A. flucki*.

Philippi gives the dimensions of his shell as 65 x 37 x 10 mm. As von Martens (l. c.) suggests there is probably a typographical error in the diameter as stated, which is quite inconsistent with the diagnosis, which says "*tumida*". So far as the length and height are concerned, the relative proportions of Philippi's type and that of *flucki* are substantially the same.

But Philippi states that his shell is gaping at both ends and that the posterior end is "*paullo altiore, oblique subtruncata*," neither of which specifications apply to this species. Philippi applied the term "*oblique truncata*" also to two other species, *A. incarum* and *U. valdivianus*, both of which are figured by Pfeiffer in Nov. Conch., III, pls. 103 and 105, and these show distinctly what Philippi meant by this expression and that it does not apply to the species here described.

CALIFORNIAN HELICES

BY H. A. PILSBRY

HELMINTHOGLYPTA FERRISSI new species.

The shell is depressed, thin, umbilicate, the width of umbilicus contained between 7 and 8 times in that of the shell. Of a pale greenish-buff tint with streaks of deeper green (mignonette-green of Ridgway); above the periphery a rather narrow chestnut-brown band without light borders. The spire has a faintly pinkish tint. Surface is very glossy. The embryonic whorls, after the first nearly smooth half-whorl, are very densely, irregularly granulose. Later whorls have somewhat sharp but very fine retractive striae. On the last whorl these are quite weak except near the suture. The